THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No:

In re the Application of: **KATO, Atsuya, et al.**

Group Art Unit: **1792**

Serial No.: **10/552,031**

Examiner: **SCHIRO, Ryan Raymond**

Filed: **October 3, 2005**

P.T.O. Confirmation No.: 6974

For: **THERMOSETTING LIQUID COATING COMPOSITION FOR ALUMINUM WHEEL AND METHOD OF COATING ALUMINUM WHEEL**

BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: November 30, 2009

Sir:

This Appeal Brief is respectfully submitted under the Notice of Appeal filed on October 1, 2009.

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I. REAL PARTY IN INTEREST

The real party in interest is Kansai Paint Co., LTD., of Amagasaki-shi, Japan, as evidenced by the assignment recorded on October 3, 2005, at reel 017851, frame 0761.

II. RELATED APPEALS AND INTERFERENCES

Appellant is aware of no related prior or pending appeal, interference, or judicial proceeding that may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-14 are pending in this application. The rejections of claims 1-14 are under appeal.

IV. STATUS OF AMENDMENTS

No amendment has been made subsequent to the final Office action dated April 10, 2009.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 1 is the only independent claim. Method claims 7-13 are all ultimately dependent on the compositional limitations of claim 1. Independent claim 1 is summarized below. In addition, the rejection of dependent claim 14 is argued separately, and claim 14 is also summarized below.

Summary of Claim 1:

"A thermosetting liquid coating composition for an aluminum wheel comprising:"

In the background art, aluminum wheels are usually coated with a primer coating composition and then with topcoat composition(s) (page 1, lines 17-20). The presently claimed composition comprises two components, labeled (A) and (B).

"(A) a hydroxy- and carboxy-containing acrylic resin having a hydroxyl value of 90 to 150 mg KOH/g and an acid value of 1 to 30 mg KOH/g,"

Acrylic resin (A) is a base resin of the coating composition and has hydroxy and carboxy groups (page 5, line 35, to page 6, line 3). The hydroxyl value and acid value are limited in the resin (page 3, lines 17-19).

"the acrylic resin being obtained by copolymerizing a monomer mixture comprising"

The acrylic resin of component (A) is made by copolymerizing at least the following monomer components (page 6, lines 3-6). (Other components may be present (page 7, line 24, to page 9, line 2).

"10 to 50 wt.% of a C_{6-18} alkyl ester of (meth)acrylic acid,"

The first of the recited monomer components of the acylic resin (A) is a C_{6-18} alkyl ester of (meth)acrylic acid, at a content of 10-50 wt% of the components of the acrylic resin (page 6, lines 10-13). Examples are given at page 6, lines 30-34.

"8 to 40 wt.% of a secondary hydroxy-containing unsaturated monomer,"

The second of the monomer components of the acrylic resin (A) is present at content 8 to 40 wt% (page 6, lines 14-18), and this component is an unsaturated monomer containing a secondary hydroxy group. Examples are given at page 6, line 25, to page 7, line 4, and include 2-hydroxypropyl (meth)acrylate, in which 2-hydroxy is the secondary hydroxy group. Other examples include unsaturated monomers obtained by esterifying carboxy-containing unsaturated monomers with epoxy-containing compounds (page 7, lines 2-3, with examples of these compounds at page 7, lines 5-23).

The secondary hydroxy-containing unsaturated monomer may be seen in the Examples in Table 1 (page 24) of the specification, and include 2-hydroxyethyl methacrylate, hydroxypropyl

acrylate and hydroxylpropyl methacrylate. Hydroxypropyl acrylate and hydroxypropyl methacrylate occur as mixtures of secondary hydroxy and primary hydroxy isomers, and the ratio of the secondary hydroxy to primary hydroxy content in these examples is disclosed at page 24, lines 3-7.

and a carboxy-containing unsaturated monomer; and

The third recited component of acrylic resin (A) is a carboxy-containing unsaturated monomer (page 6, line 6), and examples are given at page 7, lines 20-23.

"(B) an amino resin."

Component (B) of the claimed thermosetting liquid coating composition is an amino resin, which serves as a crosslinking agent (page 9, lines 16-18). Examples are given at page 9, lines 19-30.

Summary of Claim 14:

"The coating composition according to claim 1,"

The limitations of the coating composition of claim 1 are summarized above.

"wherein the acrylic resin (A) has an acid value of 1 to 16 mg KOH/g."

The upper limit of the range of acid value of acrylic resin (A) in claim 1 is limited here to 16 mg KOH/g. This limitation is supported by the examples in Table 1 on page 24 of the specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether claims 1-7 and 14 are unpatentable under 35 U.S.C. 103(a) over Takahashi et al. (JP 04066172) in view of Takahashi et al. (US 3,883,453).

B. Whether claims 8-13 are unpatentable under 35 U.S.C. 103(a) over Takahashi (JP '172) in view of Takahashi et al. (US 3,883,453) and further in view of Hirata et al. (US 5,252,399).

VII. ARGUMENT

Ground of rejection A. Whether claims 1-7 and 14 are unpatentable under 35 U.S.C. 103(a) over Takahashi et al. (JP 04066172) in view of Takahashi et al. (US 3,883,453), herein referred to as '453).

Summary of the rejection as stated in the final Office action (April 10, 2009):

(See page 3 of the Office action). The Examiner states that "Takahashi" (i.e., JP '172) is drawn to a method for forming a coating containing a thermosetting resin on a metal raw material. The liquid coating composition is comprised of monomers such as hydroxyl, carboxyl and amino groups. The Examiner cites Takahashi at page 7, paragraph 2 (of the provided English translation), for an alkyl ester of methacrylic acid. The Examiner cites page 8, paragraph 3, for a hydroxyl value of 30 to 200 and an acid number of 20 to 150.

The Examiner cites the Example at page 20, paragraph 2, as being a preferred embodiment of Takahashi, with 30 part methylated melamine resin added to 70 parts acrylic resin. The Examiner also cites page 20, paragraph 2, as disclosing another preferred embodiment using "a hydroxyl-containing unsaturated monomer of hydroxypropyl methacrylate, as required by claim 3 ...."

The Examiner states that Takahashi does not teach the percentages of copolymers, specific monomers and epoxy resin of claims 1-4 (page 4, lines 3-4, of the Office action) and cites US'453 as disclosing a copolymer of alkyl esters of acrylic or methacrylic acid and amino resin. The Examiner cites the reference as disclosing about 4 to 25% of other hydroxy containing monomers, such as 2-hydroxypropyl (meth)acrylate, at column 2, lines 45-47 and 50-56.

The Examiner states that it would have been obvious:

> "to combine the teachings of Takahashi [JP '172], drawn to specific hydroxyl values, acid values and intended coating use, with the teaching of '453, drawn to specific percentages and monomers as well as epoxy resin. ..., because both teachings are drawn to coating compositions that do not contain a large amount of volatile organic solvents and have higher solids content."

Arguments against the rejection of claims 1-7, and separate arguments against the rejection of claim 14, are presented below.

1.Appellant's arguments against the rejection of claims 1-7

Regarding the meaning of "secondary hydroxy -containing unsaturated monomer" in claim 1.

Before presenting the arguments, Appellant notes a disagreement with the Examiner regarding the meaning of the term "secondary hydroxy-containing unsaturated monomer" in base claim 1. It is important for Appellant's argument that this term be properly construed.

Appellant has submitted that the term "**secondary hydroxy**" in the phrase "secondary hydroxy-containing unsaturated monomer" is meant in the chemical sense, that is, a **hydroxy bonded to a secondary carbon atom (that is, a carbon atom bonded to two other carbon atoms)**. Appellant submits that this meaning of the term "secondary" is well known in the chemical arts.

The Examiner has disagreed with this understanding of the language of claim 1. Notably, in the Advisory action mailed September 14, 2009, the Examiner states in box 11:

> "Claim 1 regarding the 'secondary hydroxy-containing monomer' was interpreted by the examiner to be a **secondary monomer** which contains a hydroxy group. The applicant alleges that the claim is meant to be interpreted as a monomer which has a **secondary hydroxy group**. Although the examiner has interpreted the claim in a different manner than the applicant has meant, it is believed that the widest scope of the claim has been rejected in the previous office action." (emphasis added)

Appellant submits that Appellant is entitled to proper interpretation of the claim language and claim scope in the appeal of this rejection, and that the Examiner's misinterpretation of the claim scope has created an improper rejection.

Appellant therefore reviews the Examiner's interpretation and the support in the specification for the meaning of "secondary hydroxy-containing unsaturated monomer."

The Examiner argues that the term is being interpreted to be a "secondary monomer." Apparently, the Examiner is stating that the term "secondary" refers to the this component being the **second** of the three recited components of "acrylic resin (A)." As such, the Examiner considers the term "secondary" not to be used here in the chemical sense, and therefore not to require a hydroxy on a secondary carbon atom.

However, in standard English usage, "secondary" does **not** mean "second on a list." Appellant refers, for example, to a dictionary definition: "secondary *adj* 1 a: of second rank, importance or value." (*Webster's Ninth New Collegiate Dictionary*, Merriam-Webster, Inc., 1984, page 1060).

Moreover, if "secondary" were somehow being used to mean "second," then the corresponding terms "primary" and "tertiary" would appear in the claims to refer to the other two components of the acrylic resin (A). However, these terms are not used in the claims. Therefore, there is no basis in the general claim wording for interpreting the term "secondary" as referring to a second listed component.

Appellant submits that the use of the term "secondary hydroxy" is well known in the chemical art. That chemical interpretation of this term is consistent with the specifically stated example of 2-hydroxypropyl (meth)acrylate at page 7, line 1. In addition, the specification discloses the ratio of "secondary hydroxy groups/primary hydroxy groups" at page 24, lines 4 and 6 of the

specification. There can be no doubt that "secondary hydroxy" and "primary hydroxy" are being used in the specification in their standard chemical meanings.

Appellant therefore requests that the Board take note that much of the present rejection is based on the Examiner's improper consideration that any hydroxy-containing monomer (in particular, primary hydroxy-containing monomer) meets the limitation of the "secondary hydroxy-containing monomer" of claim 1.

Appellant here presents two arguments against the rejection of claims 1-7:

a) There is, in fact, no motivation to combine the Takahashi JP'172 and Takahashi US'453 references.

b) There are effects of the present claims, commensurate with the claim limitations, that are clearly unexpected over Takahashi JP'172 and Takahashi US'453.

Argument (a): No motivation to combine US '453 with JP '172

The Examiner asserts that a skilled artisan would have been motivated to combine the teachings of US '453 with those of JP '172, because: "both teachings are drawn to coating compositions that do not contain a large amount of volatile organic solvents and have higher solids content" (page 4, last full paragraph, of the final Office action).

However, Appellant submits that neither US '453 nor JP '172 provides any motivation to lead a person having ordinary skill in the art to combine their teachings.

JP '172 discloses (page 3, lines 18 to 23, of English translation) that "an organic solvent-type coating material...contains a large amount of organic solvent, which is not preferable from the standpoint of environmental hygiene or fire resistance." JP '172 discloses that, in order to solve the above problem, the aqueous coating composition of the reference was developed.

That is, the object of JP '172 is not merely to provide a composition that "does not contain a large amount of volatile organic solvents," (as the Examiner stated), but to develop a **water-based** coating composition (page 5, line 6). That is, being "without a large amount of organic solvent" (see page 4, line 19) can be understood to mean **substantially free from organic solvent**.

Moreover, the Examiner is incorrect in stating that US '453 is also drawn to a composition that "does not contain a large amount of volatile organic solvents." In fact, the object of US '453 is to attain a high content of the acrylic resins graft polymerized **"in cellulose acetate butyrate (... CAB) solution"** (column 1, lines 23-28), that is, in an organic solvent. In addition, other organic solvents are also required for the CAB in the invention (column 1, lines 46-60). That is, the monomers disclosed in US '453 are those desirable for preparing an acrylic resins graft polymerized in CAB in an **organic solvent**.

Therefore, the Examiner's stated motivation for combining the references is incorrect, and in fact, the teaching of JP '172 for a water-based composition is completely inconsistent with the requirement for organic solvents in US '453. Therefore, one of ordinary skill in the art **would not be motivated** to use the particular monomers disclosed US'453 in the **aqueous coating composition**

of JP '172. Since there is no motivation to combine the references, there is no *prima facie* case of obviousness for the present claims.

Argument (b): Unexpected results of the present invention

Appellant also submits that the thermosetting liquid coating composition for an aluminum wheel of the present invention achieves "unexpected effects" commensurate with the limitations of claim 1. In particular, these effects are associated with using a mixture containing the recited amount of C_{6-18} alkyl ester of (meth)acrylic acid and the recited amount of secondary hydroxy-containing unsaturated monomer as monomers in making the hydroxy- and carboxy-containing acrylic resin.

These effects of the present invention can be seen with reference to data in the present specification. Although specific comparative examples from Takahashi JP'172 are not reproduced, the data can be seen to demonstrate effects commensurate with claim limitations not disclosed in the prior art.

Specifically, the general teaching of Takahashi JP '172 is for a copolymer obtained by subjecting a (1) hydroxyl group-containing vinyl-based unsaturated monomer, a (2) carboxyl group-containing vinyl-based unsaturated monomer, and, as needed, (4) another radical polymerizable unsaturated monomer to a radical polymerization reaction (page 6, line 6, of English translation). Appellant notes that there is no disclosure at page 6, lines 17-21, that the hydroxyl group-containing vinyl-based unsaturated monomer should be a **secondary** hydroxy-containing unsaturated monomer.

Appellant also notes that the Examiner has cited JP'172 at page 20, paragraph 2, as disclosing use of hydroxypropyl methacrylate. This refers to page 20, line 17, of the translation. However, this disclosure is only of "hydroxypropyl methacrylate," and it is **unspecified** whether this is 3-hydroxypropyl or 2-hydroxypropyl methacrylate. That is, it is unclear if this is a primary or secondary hydroxy compound, and there is no specific disclosure of or suggestion for a secondary hydroxy-containing monomer in the JP'172 reference.

The effects of the present invention can be seen clearly in the data of Table 5 (page 32) of the present specification, which shows performance test results measuring the parameters of Appearance and Primer Coat Adhesion for three inventive Examples (10-12) and seven Comparative Examples (22-28) of multilayered coating films. Examples 10-12 use the primer coating compositions of Examples 7-9, respectively, which use acrylic resin solutions A-1 to A-3, respectively (see Table 1). Comparative Examples 22-28 use the primer coating compositions of Comparative Examples 15-21, respectively (see page 31, line 8, and Table 4 on page 30), which use acrylic resin solutions A4-A10, respectively (see Table 1 on page 24).

As can be seen with reference to Tables 4 and 1, the different Comparative examples fail to meet different limitations of claim 1. For example, acrylic resin solution A-4 has only 8% (i.e., below the claimed range) of the C_{6-18} alkyl ester of methacrylic acid. Acrylic resin solution A-5 has 60% (i.e., above the claimed range) of the alkyl ester of methacrylic acid. Acrylic resin solution A-6 has about 4% (i.e., below the claimed range) of the secondary hydroxy-containing unsaturated monomer (2-hydoxypropyl acrylate), with the remainder being primary hydroxy-containing

monomers. The comparison is controlled in that the Comparative Examples have the same overall total of hydroxy-containing monomer (28%) as the inventive examples. Examples A-7 to A-10 are comparative because they fail to meet the hydroxyl value or acid value limitations.

As can be seen in Table 5, **only the inventive examples**, meeting all of the claim parameters, achieve the excellent ("A") grade for both Appearance and Primer Coat Adhesion. These results address several of the limitations of claim 1 and these data demonstrate effects that are **commensurate with the combination of claim limitations in claim 1**.

Moreover, these results associated with the present claim limitations are clearly unexpected over the cited references. Of particular note is the result of Comparative Example 24 (Comparative Example 17, acrylic resin solution A-6), which fails to meet the limitation on the secondary hydroxy-containing monomer, but is controlled to have the same amount of overall hydroxy-containing monomer (the remainder being primary-hydroxy), which results in a non-excellent result in the Appearance parameter. As discussed above, there is no suggestion in JP '172 for the use of a "secondary hydroxy-containing monomer" and clearly no teaching in the reference of any effect associated with use of a secondary hydroxy-containing monomer. Any effect associated with this limitation is unexpected over the reference. This result alone must be considered to demonstrate unexpected results associated with the "secondary hydroxy" limitation.

In the final Office action dated April 10, 2009, the Examiner responded to the original presentation of this "unexpected results" argument by stating:

> "'453 teaches that higher coating buildup, which is essentially the same as the ability of a coat to be recoated, and excellent sag resistance can be achieved using **the composition** (col. 4, lines 36-39). .... Also, '453 teaches **the composition** has improved pop resistance that is twice the amount of conventional coatings." (page 7 of the Office action, emphasis added).

The Examiner appears to be arguing that the results associated with the present invention would not be "unexpected" over the teachings of US '453. However, the Examiner has referred only to effects achieved generally by **the composition of Takahashi** US '453. This teaching cannot be used to predict any effects associated with **the limitations of the present claims**. In particular, Takahashi US'453 discloses a composition containing (A) 60-90% of a copolymer of mixed alkyl esters of acrylic or methacrylic acid in a cellulose acetate butyrate solution in the presence of a peroxide catalyst, and (B) 10-40 percent amino resin. The general teaching of Takahashi is not even for a mixture of an acrylic resin with an amino resin, and there is no specific disclosure of a hydroxy- and carboxy-containing resin. That is, the effects referred to by the Examiner, discussed at column 4, lines 20-57 of Takahashi US'453, are associated with Takahashi's invention, which does not have the basic limitations of claim 1. Takahashi's disclosure therefore does not indicate that any of the effects associated with the limitations of present claim 1 would be expected.

Accordingly, the above-discussed effects, which are commensurate with the limitations of claim 1, are unexpected over the cited references.

Appellant's argument against the rejection of claim 14

Appellant separately argues against the rejection of claim 14.

Further regarding claim 14, the Examiner states (page 5 of the final Office action) that:

> "Takahashi [JP '172] does not teach the specific acid value range of the resin required by claim 14.
> It would have been obvious to a person ordinarily skilled in the art at the time of the invention to modify Takahashi in view of '453 to include the 1-16 mg KOH/g acid number, as required by claim 14. One would have been motivated to make this modification because the acid number of the resin is considered a cause effective variable that can fall within a wide range of values." (page 5, line 4, of the Office Action)

Claim 14 depends from claim 1, and Appellant's above arguments against the rejection of base claim 1 are applicable to claim 14. However, the limitation of claim 14 further distinguishes this claim from the references, and Appellant also presents the following additional argument against the rejection of claim 14.

First of all, in JP '172, the hydroxyl group and carboxyl group-containing vinyl resin has an acid number of about 20 to 150 (page 8, line 15, of the English translation). This range **does not overlap** the range recited in claim 1, and does not provide a basis for a *prima facie* case of obviousness.

Moreover, not only does JP '172 **not suggest** the acid value range of claim 14, JP '172, in fact, **teaches away** from selecting an acid value of 1-16 mg KOH/g. Specifically, JP '172 discloses on page 3, lower right column, lines 8-11 (page 9, lines 1-4 of English translation), that:

> "it is not preferable that the acid number be less than about 20 ... because while mixing the colloid-like silica constituent, it aggregates and gels, and it is difficult to obtain a stable water-based coating material."

This is a specific teaching **against** an acid value of less than 20 mg KOH/g, a lower limit well above the upper limit in claim 14. Therefore, a person with an ordinary skill in the art would not modify the composition of JP '172 to have an acid value of 1-16 mg KOH/g, further arguing against the *prima facie* case of obviousness for claim 14.

Ground of rejection B. Whether claims 8-13 are unpatentable under 35 U.S.C. 103(a) over Takahashi (JP '172) in view of '453 further in view of Hirata et al. (US 5,252,399).

Summary of Examiner's argument in the final Office action of April 10, 2009

The Examiner cites JP '172 and US '453 as in the rejection of claim 1, and states that Takahashi in view of '453 does not specify a powdered primer precoating or a clear coating, as required by claims 8-13. The Examiner cites Hirata for disclosing a weather-resistant coating for aluminum wheels consisting of a primer layer of a powder coating composition, a base coat layer, a topcoat composition and a clear acrylic barrier layer. The Examiner states that it would have been obvious to modify JP '172 in view of US '453 with the four layer coating composition taught by Hirata, "because all of the references are drawn to lowering the amount of organic solvents used in the coating ..."

Appellant's argument

Claims 8-13 are methods for coating an aluminum wheel. Claims 8-13 are dependent claims and recite steps requiring the coating compositions of claims 5, 6, 1, 5, 6 and 1, respectively. Appellant has argued above that the compositions of claims 1, 5 and 6 are not obvious over the combination of JP '172 and US '453. Since claims 8-13 require the coating compositions of the base claims, claims 8-13 are not obvious over the combination of JP'172 and US'453.

Hirata is cited only for disclosing layers of coating including a primer layer and additional layers, and not for the particular composition of the primer layer. The Hirata reference does not

provide any motivation to modify the compositions of JP '172 or US '453. Claims 8-13 are therefore not obvious over JP '172, US '453 and Hirata, taken separately or in combination.

In the event this paper is not timely filed, appellant hereby petitions for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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Appendices: VIII. Claims Appendix
IX Evidence Appendix
X. Related Proceedings Appendix

VIII. CLAIMS APPENDIX

Claims 1-14 are involved in the appeal.

Claim 1: A thermosetting liquid coating composition for an aluminum wheel comprising: (A) a hydroxy- and carboxy-containing acrylic resin having a hydroxyl value of 90 to 150 mg KOH/g and an acid value of 1 to 30 mg KOH/g, the acrylic resin being obtained by copolymerizing a monomer mixture comprising 10 to 50 wt.% of a C_{6-18} alkyl ester of (meth)acrylic acid, 8 to 40 wt.% of a secondary hydroxy-containing unsaturated monomer, and a carboxy-containing unsaturated monomer; and

(B) an amino resin.

Claim 2: The coating composition according to claim 1 wherein the proportion of amino resin (B) is 5 to 70 parts by weight per 100 parts by weight of acrylic resin (A) on a solids basis.

Claim 3: The coating composition according to claim 1 wherein the secondary hydroxy-containing unsaturated monomer is at least one member selected from the group consisting of 2-hydroxypropyl acrylate, 2-hydroxypropyl methacrylate, and unsaturated monomers obtained by esterifying a carboxy-containing unsaturated monomer with an epoxy-containing compound.

Claim 4: The coating composition according to claim 1 which further comprises an epoxy resin (C).

Claim 5: The coating composition according to claim 1 which is a primer coating composition for an aluminum wheel.

Claim 6: The coating composition according to claim 1 which is a top clear coating composition for an aluminum wheel.

Claim 7: A method of coating an aluminum wheel comprising:

(1) applying the primer coating composition of claim 5 to an aluminum wheel, optionally followed by baking; and

(2) applying a colored thermosetting coating composition to the primer coat obtained in step (1), followed by baking.

Claim 8: A method of coating an aluminum wheel comprising:

(1) applying the primer coating composition of claim 5 to an aluminum wheel, optionally followed by baking;

(2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and

(3) applying a clear coating composition to the colored or lustrous coat obtained in step (2), followed by baking.

Claim 9: A method of coating an aluminum wheel comprising:

(1) applying a liquid primer coating composition to an aluminum wheel, optionally followed by baking;

(2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and

(3) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (2), followed by baking.

Claim 10: A method of coating an aluminum wheel comprising:

(1) applying the coating composition of claim 1 to an aluminum wheel, optionally followed by baking;

(2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and

(3) applying the coating composition of claim 1 to the colored or lustrous coat obtained in step (2), followed by baking.

Claim 11: A method of coating an aluminum wheel comprising:

(1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

(2) applying the primer coating composition of claim 5 to the powder primer coat obtained in step (1), optionally followed by baking;

(3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

(4) applying a clear coating composition to the colored or lustrous coat obtained in step (3), followed by baking.

Claim 12: A method of coating an aluminum wheel comprising:

(1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

(2) applying a liquid primer coating composition to the powder primer coat obtained in step (1), optionally followed by baking;

(3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

(4) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (3), followed by baking.

Claim 13: A method of coating an aluminum wheel comprising:

(1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

(2) applying the coating composition of claim 1 to the powder primer coat obtained in step (1), optionally followed by baking;

(3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

(4) applying the coating composition of claim 1 to the colored or lustrous coat obtained in step (3), followed by baking.

Claim 14: The coating composition according to claim 1, wherein the acrylic resin (A) has an acid value of 1 to 16 mg KOH/g.

IX. EVIDENCE APPENDIX

No evidence is attached.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.